

*AMENDMENTS TO THE CLAIMS*

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for inducing an immunological response against a malignant pancreatic cell in an individual, wherein the method comprises:

(a) selecting an individual having malignant pancreatic cells or at risk for developing such a pancreatic tumor,

(b) administering to the individual a first poxvirus vector containing one or more DNA segments that encode (i) carcinoembryonic antigen (CEA), ~~(CEA)~~ or an ~~antigen~~ antigenic portion thereof, or a modified version thereof, and (ii) mucin (MUC), ~~(MUC)~~ or an ~~antigen~~ antigenic portion thereof, or a wobbled version thereof, and

(c) at regular intervals thereafter administering at least a second poxvirus vector containing one or more DNA segments that encode (i) ~~carcinoembryonic antigen (CEA)~~ or CEA, an antigenic portion thereof, or a modified version thereof, and (ii) ~~mucin (MUC)~~ or MUC, an antigenic portion thereof, or a wobbled version thereof,

such that an immunological response against the malignant pancreatic cell is induced in the individual.

2.-6. (Canceled)

7. (Previously Presented) The method according to claim 1, wherein said poxvirus vector is selected from the group consisting of an orthopox virus vector; avipox virus vector; a suipox virus vector; a capripox virus vector; a leporipox virus vector; and an iridovirus vector.

8. (Previously Presented) The method according to claim 1, wherein said poxvirus vector is a replication impaired or non-replicating poxvirus vector.

9. (Original) The method according to claim 8, wherein said poxvirus vector is an orthopox vector.

10. (Original) The method according to claim 9, wherein said orthopox virus vector is vaccinia.

11. (Canceled)

12. (Previously Presented) The method of claim 1, wherein the mucin is selected from the group consisting of MUC-1, MUC-2, MUC-3, MUC-4, MUC-SAC, MUC-SB, MUC-6, MUC-7, MUC-11, MUC-12, wobbled MUC, and antigenic portions thereof.

13.-15 (Canceled)

16. (Previously Presented) The method of claim 12, wherein the mucin is wobbled MUC-1 or wobbled mini-MUC.

17. (Previously Presented) The method of claim 1, wherein the first vector is an orthopox vector, and the second vector is an avipox vector.

18. (Original) The method of claim 17, wherein the orthopox vector is vaccinia.

19. (Original) The method of claim 18, wherein the vaccinia is an attenuated vaccinia.

20. (Original) The method of claim 19, wherein the attenuated vaccinia is MVA or NYVAC.

21. (Previously Presented) The method of claim 17, wherein the orthopox vector is administered in one to three administrations at set intervals, and the avipox vector is administered in multiple administrations at set intervals.

22. (Original) The method of claim 21, wherein the set interval is 20 days to 90 days.

23.-44. (Canceled)

45. (New) The method of claim 1, wherein the one or more DNA segments comprises SEQ ID NO: 1 and SEQ ID NO: 3, or encodes SEQ ID NO: 2 and SEQ ID NO: 4.

46. (New) The method of claim 1, wherein the immunological response against a malignant pancreatic cell is a cell-mediated immune response.

47. (New) The method of claim 46, wherein the cell-mediated immune response is against malignant pancreatic cells expressing CEA and MUC.

48. (New) A method of inhibiting growth of a malignant pancreatic cell in an individual, wherein the method comprises:

(a) selecting an individual having malignant pancreatic cells or at risk for developing such a pancreatic tumor,

(b) administering to the individual a first poxvirus vector containing one or more DNA segments that encode (i) carcinoembryonic antigen (CEA), an antigenic portion thereof, or a modified version thereof, and (ii) mucin (MUC), an antigenic portion thereof, or a wobbled version thereof, and

(c) at regular intervals thereafter administering at least a second poxvirus vector containing one or more DNA segments that encode (i) CEA, an antigenic portion thereof, or a modified version thereof, and (ii) MUC, an antigenic portion thereof, or a wobbled version thereof,

such that the growth of the malignant pancreatic cell is inhibited in the individual.

49. (New) The method of claim 48, wherein the one or more DNA segments comprises SEQ ID NO: 1 and SEQ ID NO: 3, or encodes SEQ ID NO: 2 and SEQ ID NO: 4.